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TMH/DAG:lam 02/17/04 6395-61666 254073

PATENT

Attorney Reference Number 6395-61666

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re application of:** Liu *et al.*

**Application No.** 10/017,168

**Filed:** December 14, 2001

**Confirmation No.** 9437

**For:** COMPOSITIONS AND METHODS FOR  
DETECTING TREPONEMA PALLIDUM

**Examiner:** Vanessa L. Ford

**Art Unit:** 1645

**Attorney Reference No.** 6395-61666

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attorney  
for Applicant(s)

Debra A. Gordon

Date Mailed February 17, 2004

COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

TRANSMITTAL LETTER

Enclosed for filing in the above application is:

- ☒ A copy of the Information Disclosure Statement ("IDS") submitted on January 25, 2002 along with a copy of the postcard acknowledging receipt by the PTO on February 7, 2002.
- ☒ It is believed that no fees are required, as the IDS was originally filed within three months of the filing date of a national application. Please charge any additional fees that may be required in connection with filing this IDS and any extension of time, or credit any overpayment, to Deposit Account No. 02-4550. A copy of this sheet is enclosed.
- ☒ Please return the enclosed postcard to confirm that the items listed above have been received.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

By Debra A. Gordon  
Debra A. Gordon, Ph.D., J.D.  
Registration No. 54,128



TMH/DAG:lam 02/17/04 254076  
PATENT

Attorney Reference Number 6395-61666  
Application Number 10/017,168

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re application of:** Liu *et al.*

**Application No.** 10/017,168

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Attorney  
for Applicant(s)

Debra A. Gordon

Date Mailed February 17, 2004

COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

Applicants mailed an Information Disclosure Statement ("IDS") to the Patent and Trademark Office ("PTO") on January 25, 2002, within three months of the filing date of a national application (Exhibit A). According to Examiner Ford, in a telephone conversation on February 13, 2004, it appears that the IDS has been misplaced within the PTO and/or has not been properly entered into the file.

Therefore, Applicants herewith resubmit a complete copy of the IDS, as originally submitted on January 25, 2002. In addition, Applicants provide the a copy of the postcard acknowledging receipt of this IDS by the PTO on February 7, 2002 (Exhibit B).

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

By

Debra A. Gordon

Debra A. Gordon, Ph.D., J.D.  
Registration No. 54,128



WPMH/DJZ 1/25/02 6395-61666 95101

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PATENT

Attorney Reference Number 6395-61666

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Liu *et al.*

Art Unit: Not yet assigned

Application No. 10/017,168

Filed: December 14, 2001

For: COMPOSITIONS AND METHODS FOR  
DETECTING TREPONEMA PALLIDUM

Examiner: Not yet assigned

Date: January 25, 2002

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on January 25, 2002, as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, WASHINGTON D.C. 20231.

Tanya M. Harding, Ph.D.  
Attorney for Applicant

TRANSMITTAL LETTER

COMMISSIONER FOR PATENTS  
WASHINGTON, DC 20231

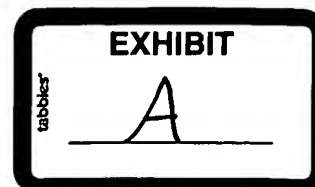
Enclosed for filing in the application referenced above are the following:

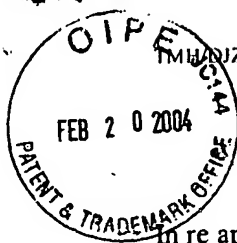
- ☒ Information Disclosure Statement
- ☒ Form 1449 and 23 references cited thereon
- ☒ The Director is hereby authorized to charge any additional fees that may be required, or credit over-payment, to Account No. 02-4550. A copy of this sheet is enclosed.
- ☒ Please return the enclosed postcard to confirm that the items listed above have been received.

Respectfully submitted,  
KLARQUIST SPARKMAN, LLP

By \_\_\_\_\_  
Tanya M. Harding, Ph.D.  
Registration No. 42,630

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446  
cc: Docketing





TMJ/NJZ.cb 01/25/02 6395-61666 89684

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Liu et al.

Application No.: 10/017,168

Filed: December 14, 2001

For: COMPOSITIONS AND METHODS FOR  
DETECTING TREPONEMA PALLIDUM

Examiner: Not yet assigned

Date: January 25, 2002

Art Unit: Not yet assigned

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on January 25, 2002 as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.

Tanya M. Harding, Ph.D.  
Attorney for Applicant

INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. § 1.97(b)(1)

COMMISSIONER FOR PATENTS  
WASHINGTON, DC 20231

Sir:

Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Applicants filed this Information Disclosure Statement ("IDS") within three months of the filing date of a national application. As a result, no fee should be required to file this IDS. However, if the Patent Office determines that a fee is required for Applicants to file this Information Disclosure Statement, please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550. A duplicate copy of this Information Disclosure Statement is enclosed.

Respectfully submitted,

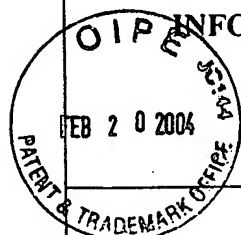
KLARQUIST SPARKMAN, LLP

By

Tanya M. Harding, Ph.D.  
Registration No. 42,630

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446  
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INFORMATION DISCLOSURE  
STATEMENT

BY APPLICANT

Docket: 6395-61666

App: 10/017,168

Applicant: Liu *et al.*

Filed: December 14, 2001

Art Unit:

## U.S. PATENT DOCUMENTS

Init.*	Number	Date	Name	Class	Sub	Filed
	4,738,932	04/19/88	Yabusaki			
	4,894,328	01/16/90	Alderete <i>et al.</i>			
	5,643,733	07/01/97	Robinson <i>et al.</i>			
	5,643,751	07/01/97	Robinson <i>et al.</i>			
	5,753,459	05/19/98	Blanco <i>et al.</i>			
	5,770,719	06/23/98	Kapoor <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

Number	Date	Country	Class	Sub
WO 95/02186	01/19/95	PCT (WIPO)		

## OTHER DOCUMENTS

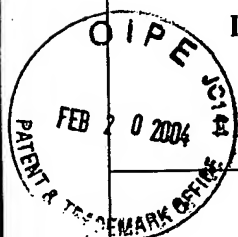
	Fraser <i>et al.</i> , "Complete Genome Sequence of <i>Treponema pallidum</i> , the Syphilis Spirochete," <i>Science</i> , 281:375-388 (July 17, 1998).
	Green <i>et al.</i> , "Identification, sequences, and expression of <i>Treponema pallidum</i> chemotaxis genes," <i>DNA Sequence</i> 7(5):267-84 (1997). (ABSTRACT ONLY)
	Pillay <i>et al.</i> , "Molecular Subtyping of <i>Treponema pallidum</i> Subspecies <i>pallidum</i> ," <i>Sexually Trans. Dis.</i> , 25(8):408-414 (Sept. 1998).
	Pillay <i>et al.</i> , "Molecular Typing of <i>Treponema pallidum</i> in South Africa: Cross-Sectional Studies," <i>J. Clin. Microbio.</i> , 40(1):256-258 (Jan. 2002).

EXAMINER:

DATE

\*Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if not in conformance and not considered. Send copy.

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# INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

Docket: 6395-61666

App: 10/017,168

Applicant: Liu *et al.*

Filed: December 14, 2001

Art Unit:

## OTHER DOCUMENTS

Seppa, "Researchers solve syphilis genome.(genome of *Treponema pallidum* decoded)," *Science News*,  
[www.findarticles.com/cf\\_0/m1200/n5\\_v154/21015212/print.jhtml](http://www.findarticles.com/cf_0/m1200/n5_v154/21015212/print.jhtml), (Aug. 1, 1998).

Shevchenko *et al.*, "Molecular Characterization and Cellular Localization of TpLRR, a Processed Leucine-Rich Repeat Protein of *Treponema pallidum*, the Syphilis Spirochete," *J. Bacter.*, 179(10):3188-3195 (May 1997).

Stamm *et al.*, "Nucleotide Sequence of the *Treponema pallidum* Eno Gene," *DNA Sequence*, 7(5):261-265 (1997). (ABSTRACT ONLY)

Sutton *et al.*, "Molecular Subtyping of *Treponema pallidum* in an Arizona County with Increasing Syphilis Morbidity: Use of Specimens from Ulcers and Blood," *J. Infect. Dis.*, 2001;183:1601-1606 (June 1, 2001).

Walfield *et al.*, "Primary Structure of an Oligomeric Antigen of *Treponema pallidum* – For use in Sero-Diagnosis," *Infect. Immun.*, 57(2):633-635 (1989). (ABSTRACT ONLY)

(No listed author) "Scientists Decipher Syphilis Genome," *Appl. Gen. News* (Sept. 1, 1998).

(No listed author) "Scientists Report on the Complete Genome of *Treponema pallidum*, The Syphilis Spirochete," *PR Newswire* (July 16, 1998).

GenBank Accession #AF015824, *Treponema pallidum* acidic repeat protein gene, complete cds. (Jan. 2, 1998).

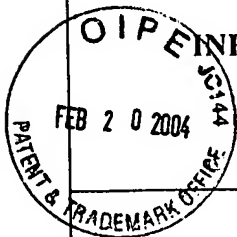
GenBank Accession #AF342806, *Treponema pallidum* subsp. pertenue strain CDC2 acidic repeat protein (arp) gene, complete cds. (Sept. 13, 2001).

EXAMINER:

DATE

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# INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

Docket: 6395-61666

App: 10/017,168

Applicant: Liu *et al.*

Filed: December 14, 2001

Art Unit:

## OTHER DOCUMENTS

GenBank Accession #AF342807, *Treponema pallidum* subsp. endemicum strain Bosnia acidic repeat protein (arp) gene, complete cds. (Sept. 13, 2001).

GenBank Accession #AF411124, *Treponema pallidum* subsp. pallidum strain Nichols acidic repeat protein (arp) gene, complete cds. (Sept. 26, 2001).

GenBank Accession #AF411126, *Treponema pallidum* subsp. pertenue strain CDC1 acidic repeat protein (arp) gene, complete cds. (Sept. 26, 2001).

EXAMINER:

DATE

\*Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if not in conformance and not considered. Send copy.



CLIENT/MATTER NO. 6395-61664 ATTY/SEC DJZ: c6

INVENTOR(S): Liu, et. al

APP. NO. 10/017,168 FILING DATE 12/14/01

The following, due \_\_\_\_\_, mailed 1/25/02

by First Class Mail, was received in the U.S. PTO on the date stamped hereon:

<input type="checkbox"/> Amendment <input type="checkbox"/> Marked Up Claims/Spec. <input type="checkbox"/> After Final Rejection	
<input type="checkbox"/> Extension of Time/Extension Fee for _____ Months	
<input type="checkbox"/> Notice to File Missing Parts - Date _____	<input type="checkbox"/> Ltr to Draftsperson
<input type="checkbox"/> Notice to File Corrected App. Papers - Date _____	<input type="checkbox"/> Notice-Allowability
<input type="checkbox"/> Comb. Dec./POA <input type="checkbox"/> Sht(s) Drawings <input type="checkbox"/> Late Fee	<input type="checkbox"/> Sht(s) Drawings
<input type="checkbox"/> Issue Fee Transmittal (Form PTOL-85b)	<input type="checkbox"/> Sequence Listing _____ pages
<input type="checkbox"/> Supp. Dec. <input type="checkbox"/> Issue/Adv. Order fees	<input type="checkbox"/> Stmt in Comp. <input type="checkbox"/> Disk
<input checked="" type="checkbox"/> IDS <input checked="" type="checkbox"/> Form PTO-1449/Ref. <u>23</u>	<input type="checkbox"/> Petition
<input type="checkbox"/> Assignment to: _____ Recordal Sheet	
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CLIENT/MATTER NO. 6395-61664 ATTY/SEC DJZ: c6

INVENTOR(S): Liu, et. al

APP. NO. 10/017,168 FILING DATE 12/14/01

The following, due \_\_\_\_\_, mailed 1/25/02

by First Class Mail, was received in the U.S. PTO on the date stamped hereon:

<input type="checkbox"/> Amendment <input type="checkbox"/> Marked Up Claims/Spec. <input type="checkbox"/> After Final Rejection	
<input type="checkbox"/> Extension of Time/Extension Fee for _____ Months	
<input type="checkbox"/> Notice to File Missing Parts - Date _____	<input type="checkbox"/> Ltr to Draftsperson
<input type="checkbox"/> Notice to File Corrected App. Papers - Date _____	<input type="checkbox"/> Notice-Allowability
<input type="checkbox"/> Comb. Dec./POA <input type="checkbox"/> Sht(s) Drawings <input type="checkbox"/> Late Fee	<input type="checkbox"/> Sht(s) Drawings
<input type="checkbox"/> Issue Fee Transmittal (Form PTOL-85b)	<input type="checkbox"/> Sequence Listing _____ pages
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EXHIBIT

B